

applying a UV power meter in the optical path of the laser beam for measuring of the laser pulse energy;

applying a UV power meter in the optical path of the laser beam for measuring of the laser pulse size;

applying a UV power meter in the optical path of the laser beam for measuring a laser pulse location during performance of an ablation upon the patient's eye, the

*ant.* ablation rate determined by measuring of a size of a convergent or divergent last spot, before and after a known number of laser pulses are conducted;

summing the total energy measured at each location in said ablation;

creating a three-dimensional map of the measured energy delivered during the performance of photorefractive keratectomy upon the patient's eye;

comparing the targeted energy map and the measured energy map; and

for areas of the patient's eye with measured energy below the targeted energy, applying more laser pulses until the measured energy equals the targeted energy.

*2* ~~3~~. (Amended) The method of claim *2*<sup>1</sup> wherein the ablation rate is determined by measuring a distance between two intersecting laser beams before and after a known number of laser pulses are conducted.

*3* ~~4~~. (Amended) The method of claim *2*<sup>1</sup> wherein the actual energy delivered with each pulse is measured at a last reflective optic component before the laser impinges the cornea of the patient's eye.

*4* ~~5~~. (Amended) The method of claim *2*<sup>1</sup> wherein the ablation rate is determined by measuring central corneal thickness pre-treatment.

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(Amended) The method of claim 2 wherein the ablation rate is determined

alt.  
cont.

by measuring the number of pulses required to achieve ablation of a corneal intrastromal target of predetermined depth, wherein the intrastromal target is selected from the group comprising a dye, or a Nd:YAG laser lesion.

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